II. CLAIM AMENDMENTS

1. (Currently Amended) Method for transmitting data on a packet data channel in a transmission system having a plurality of radio frames, each frame having a plurality of sequential time slots, said method comprising:

forming the packet data channel by a number of ~~sequential~~ radio bursts in ~~a~~ certain time slots ~~in the same sequential time slot~~ in a certain sequence of radio frames, said certain time slots having the same time slot number and each of said ~~same sequential~~ time slots relating to one burst,

transmitting data in data blocks,

using the~~a~~ packet data channel by a number of packet data connections,

using an identifier in each data block to indicate a~~the~~ connection to which the data block is related, and

selecting the number of radio bursts ~~in said sequential time slots in said certain sequence of radio frames~~ used to transmit a data block of a packet data connection belonging to said number of packet data connections on said packet data channel from a certain set of values, which set contains at least two values.

2. (Previously Presented) Method according to claim 1, further comprising:

coding each of said data blocks before transmission,

aggregating the resulting coded data blocks to at least one aggregated coded data block, in which aggregated coded data blocks comprise at least one part, a number of parts of the at least one part being complete coded data blocks and a number of other parts of the at least one part being partial coded data blocks, and

transmitting each part within an aggregated coded data block by using a part-specific number of radio bursts in such a way that a sum of part-specific numbers within the aggregated coded data block is a certain predetermined number.

3. (Original) Method according to claim 2, wherein a number of aggregated coded data blocks contain only one part, which is a complete coded data block.

4. (Previously Presented) Method according to claim 2, wherein an aggregated coded data block containing a part, which is a partial coded data block, contains only said part.

5. (Previously Presented) Method according to claim 2, wherein the method, in which a certain data block is coded, is selected based on the number of radio bursts selected for said data block.

6. (Previously Presented) Method according to claim 2, wherein the number of radio bursts for transmitting a data block is selected based on the method in which said data block is coded.

7. (Previously Presented) Method according to claim 2, wherein

the number of radio bursts for transmitting a data block is selected for each packet data channel, and

all data blocks transmitted on a packet data channel are transmitted using a selected packet data channel specific number of radio bursts.

8. (Original) Method according to claim 2, wherein the number of radio bursts for transmitting a data block is selected separately for each data block.

9. (Previously Presented) Method according to claim 2, further comprising:

constructing a header for each aggregated coded data block, and

transmitting the header of the aggregated coded data block using the same radio bursts as the aggregated coded data block.

10. (Previously Presented) Method according to claim 2, further comprising:

constructing a header for each part within an aggregated coded data block, and

transmitting each header using the same radio bursts as the part related to it.

11. (Previously Presented) Method according to claim 2 further comprising communicating an allocation of the number of radio bursts, in which a part of the aggregated coded data block is transmitted, at least to a mobile

station related to the connection indicated in the data block in the part.

12. (Previously Presented) Method according to claim 11, wherein the allocation of the number of radio bursts is signaled to the mobile station using a signaling channel different from the packet data channel.

13. (Previously Presented) Method according to claim 11, further comprising:

constructing a header for an aggregated coded data block, and

transmitting the header of an aggregated coded data block using the same radio bursts as the aggregated coded data block,

wherein the allocation of the number of radio bursts is communicated to the mobile station together with said header.

14. (Previously Presented) Method according to claim 13, wherein a number of downlink radio bursts used to transmit a part within an aggregated coded data block is indicated for each part of said aggregated coded data block in said header of said aggregated coded data block.

15. (Previously Presented) Method according to claim 13, wherein an allocation of a number of uplink radio bursts is communicated to the mobile station together with said header of a downlink aggregated coded data block.

16. (Previously Presented) Method according to claim 15, further comprising:

allocating the number of uplink radio bursts to mobile stations using second identifiers and third identifiers,

reserving certain first values of the second identifier to allocate a predetermined number of uplink radio bursts to a certain mobile station,

reserving certain second values of the second identifier, which are different from the first values, to designate said predetermined number of uplink bursts to a certain group of mobile stations, and

indicating the mobile station related to certain uplink radio bursts within said predetermined number of uplink radio bursts with said third identifiers.

17. (Previously Presented) Method according to claim 16, wherein the number of uplink radio bursts, in which a part of an uplink aggregated coded data block is transmitted, is indicated for each part of said uplink aggregated coded data block in said header of a downlink aggregated coded data block.

18. (Currently Amended) Method according to claim 17, wherein the number of downlink radio bursts used to transmit a part~~apart~~ of said downlink aggregated coded data block is indicated for each part of said downlink aggregated coded data block in said header of said downlink aggregated coded data block.

19. (Currently Amended) A mobile station for transmitting data on a packet data channel in a transmission system having a plurality of radio frames, each frame having a plurality of sequential time slots, the packet data

channels formed by a number of~~sequential~~ radio bursts ~~in the same sequential time slot~~ in a certain sequence of radio frames, said certain time slots having the same time slot number and each of said certain~~same sequential~~ time slots relating to one burst, the packet data channel used by a number of packet data connections to transmit data in data blocks, said mobile station comprising:

means for transmitting uplink data blocks,

means for receiving downlink data blocks,

means for detecting the number of downlink radio bursts in which a downlink data block is transmitted, and

means for selecting the number of uplink radio bursts in which an uplink data block of a packet data connection belonging to said number of packet data connections on said packet data channel is transmitted.

20. (Previously Presented) Mobile station according to claim 19, wherein the means for selecting the number of uplink radio bursts are means for selecting the number of uplink radio bursts as indicated by a cellular radio system.

21. (Previously Presented) Mobile station according to claim 19, wherein the means for selecting the number of uplink radio bursts are means for selecting the number of uplink radio bursts independently.

22. (Original) Mobile station according to claim 19, said mobile station being a mobile station of the EGPRS system.

23. (Currently Amended) An arrangement for transmitting data on a packet data channel in a transmission system having a plurality of radio frames, each frame having a plurality of sequential time slots, the packet data channel~~s~~ formed by a number of~~sequential~~ radio bursts in certain~~the same sequential~~ time slots in a certain sequence of radio frames, said certain time slots having the same time slot number and each of said same certain~~sequential~~ time slots relating to one burst, the packet data channel used by a number of packet data connections to transmit data in data blocks, said arrangement comprising:

means for transmitting downlink data blocks,

means for receiving uplink data blocks, and

means for selecting the number of downlink radio bursts in which a downlink data block of a packet data connection belonging to said number of packet data connections on said packet data channel is transmitted.

24. (Previously Presented) An arrangement according to claim 23, further comprising means for selecting the number of uplink radio bursts in which an uplink data block is transmitted.

25. (Currently Amended) A network element for transmitting data on a packet data channel in a transmission system having a plurality of radio frames, each frame having a plurality of sequential time slots, the packet data channels formed by a number of~~sequential~~ radio bursts in certain~~the same sequential~~ time slots in a certain sequence of radio frames, said certain time slots having the same time slot number and each of said certain~~same sequential~~

time slots relating to one burst, the packet channel used by a number of packet data connections to transmit data in data blocks, said element comprising:

means for selecting the number of downlink radio bursts in which a downlink data block of a packet data connection belonging to said number of packet data connections on said packet data channel is transmitted, and

means for selecting the number of uplink radio bursts in which an uplink data block of a packet data connection belonging to said number of packet data connections on said packet data channel is transmitted.

(Original) Network element according to claim 25, said network element being a packet control unit of an EGPRS system.

27. (Currently Amended) Method for transmitting data on a packet data channel in a transmission system having a plurality of radio frames, each frame having a plurality of sequential time slots, said method comprising:

forming the packet data channel by a number of ~~sequential~~ radio bursts in certain~~the same sequential~~ time slots in a certain sequence of radio frames, said certain time slots having the same time slot number and each of said certain~~same sequential~~ time slots relating to one burst,

transmitting data in data blocks,

using the~~a~~ packet data channel by a number of packet data connections,

using an identifier in each data block to indicate the connection to which the data block is related,

selecting the number of radio bursts ~~in said sequential time slots in said certain sequence of radio frames~~ used to transmit a data block of a packet data connection belonging to said number of packet data connections on said packet data channel from a certain set of values, which set contains at least two values,

coding each of said data blocks before transmission,

aggregating the resulting coded data blocks to at least one aggregated coded data block, in which aggregated coded data blocks comprise at least one part, a number of parts of the at least one part being complete coded data blocks and a number of other parts of the at least one part being partial coded data blocks, and

transmitting each part within an aggregated coded data block by using a part-specific number of radio bursts in such a way that a sum of part-specific numbers within the aggregated coded data block is a certain predetermined number,

communicating an allocation of the number of radio bursts, in which a part of the aggregated coded data block is transmitted, at least to a mobile station related to the connection indicated in the data block in the part,

constructing a header for an aggregated coded data block, and

transmitting the header of an aggregated coded data block using the same radio bursts as the aggregated coded data block,

wherein the allocation of the number of radio bursts is communicated to the mobile station together with said header, and an allocation of a number of uplink radio bursts is communicated to the mobile station together with said header of a downlink aggregated coded data block,

and further comprising:

allocating the number of uplink radio bursts to mobile stations using second identifiers and third identifiers,

reserving certain first values of the second identifier to allocate a predetermined number of uplink radio bursts to a certain mobile station,

reserving certain second values of the second identifier, which are different from the first values, to designate said predetermined number of uplink bursts to a certain group of mobile stations, and

indicating the mobile station related to certain uplink radio bursts within said predetermined number of uplink radio bursts with said third identifiers.